IS IPT

Information Superiority Integrated Product Team

Dr. R. Tom Goodden

703 614 5290

gooddetr@js.pentagon.mil

IS IPT

Agenda

- Draft Terms of Reference
- Network Centric Warfare concept
- Plan, Process, Resources
- Draft Organization
- Schedule, Issues, Road ahead

Information Superiority

IS IPT

"[The] degree of dominance
in the information domain
that permits the conduct of operations
without effective opposition."

CJCSI S-3210.01 960102

Draft Terms of Reference

IS IPT

- Approach: **Overarching IPT**
  - oversight of *integration* function
  - establish focus teams as necessary
  - Defined: DODI 5000.2, Part 5.4
- Mission: Attached
- Schedule: Attached
- Authority: Memo, DJS 603-97
- Chair: VJ-6

IS IPT

Purpose (Mission):

- Integrate JS, CINC, Svc/Agency IS initiatives
- Define common objectives
- Establish principles for *network centric warfare*
- Establish guidelines for conducting *information superiority experiments*
- Agree on progress assessment methodologies
- Address acquisition issues

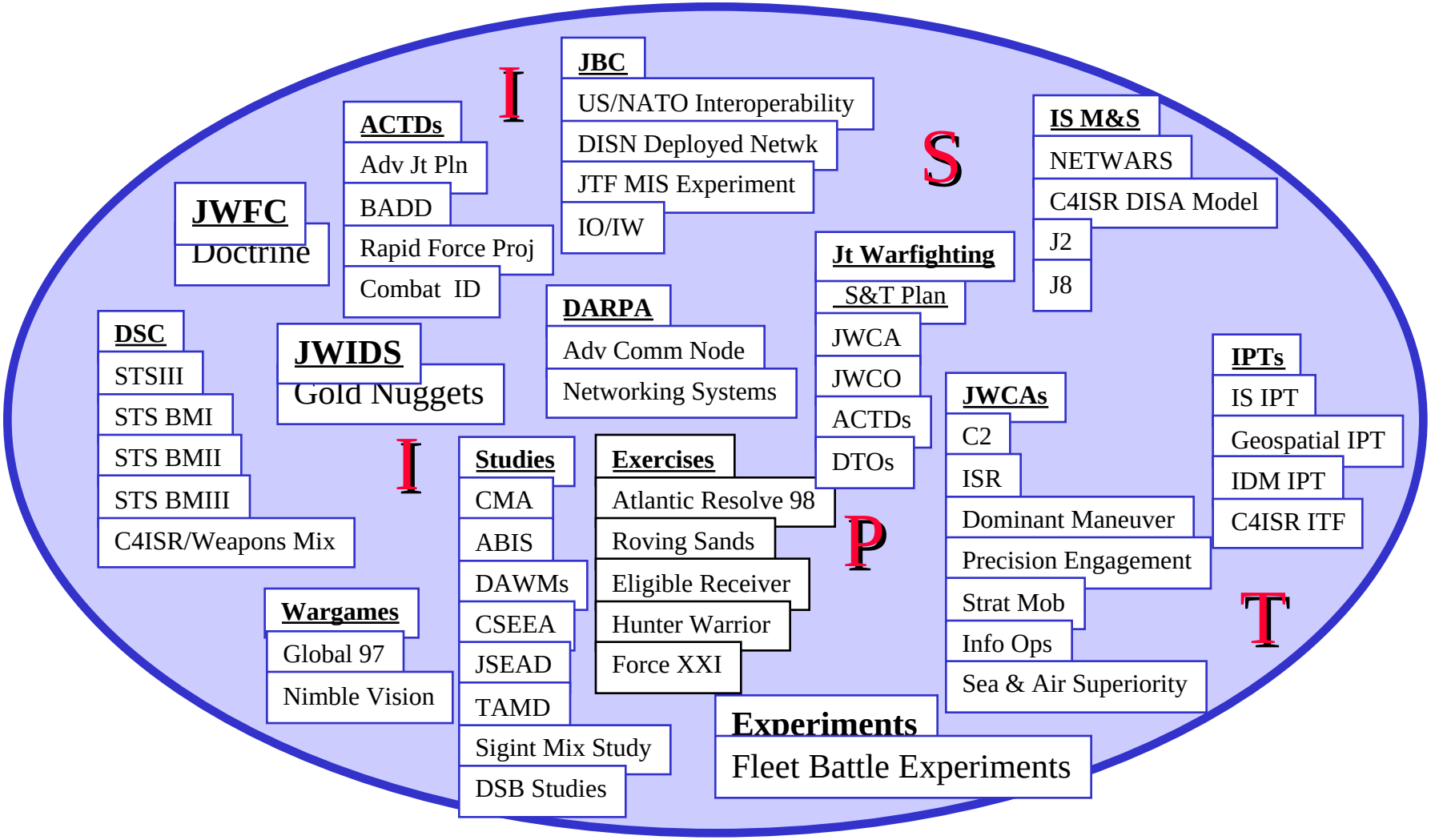
Scope:

IS IPT

- Information producing, processing, using, transfer systems
- Out to the JV 2010 objective force

Scope of Coordinating Authority

IS IPT



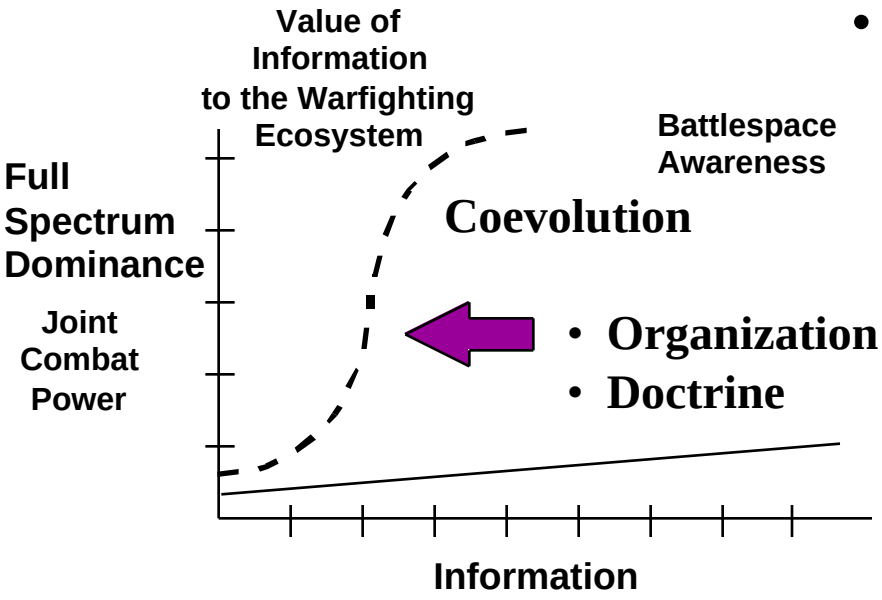
Information Superiority Experiments

IS IPT

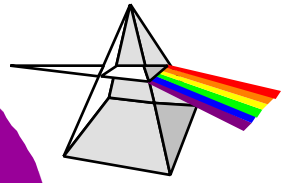
- The Emerging Joint Strategy for Information Superiority
  - Introduces the concept the Network-Centric Warfare
  - Defines the building blocks of Network-Centric Warfare:
    - The Information Grid
    - Sensor Grids → Battlespace Awareness
    - Engagement Grids → Speed of Command
  - Asserts that the Emerging Operational Concepts of JV 2010 are Network-Centric

Emerging Insights …. Warfare

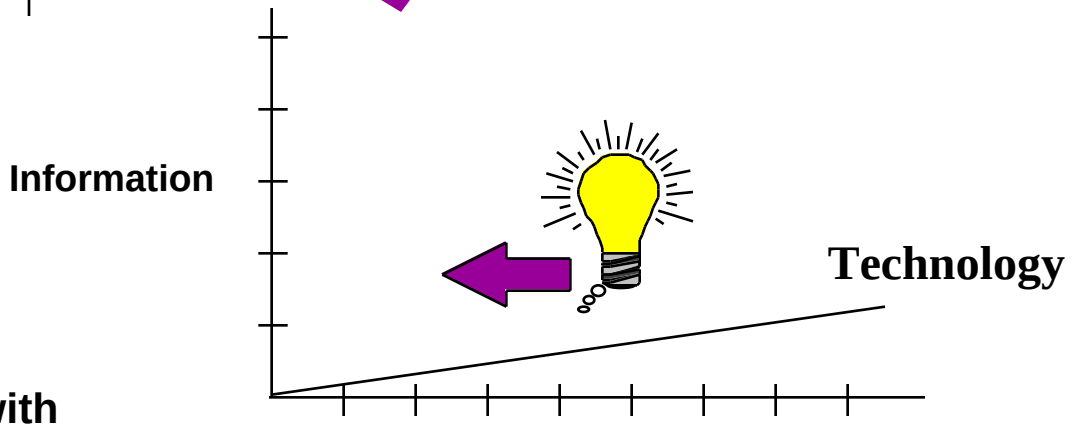
IS IPT



- **Information Superiority**
  - **Enables JV 2010 Operational Concepts**



Dominant Maneuver
Precision Engagement
Focused Logistics
Full Dimensional Protection



- **Information Superiority**
  - **Implement at minimum cost with reduced cycle times**

Network Centric Warfare
Emerging Insights

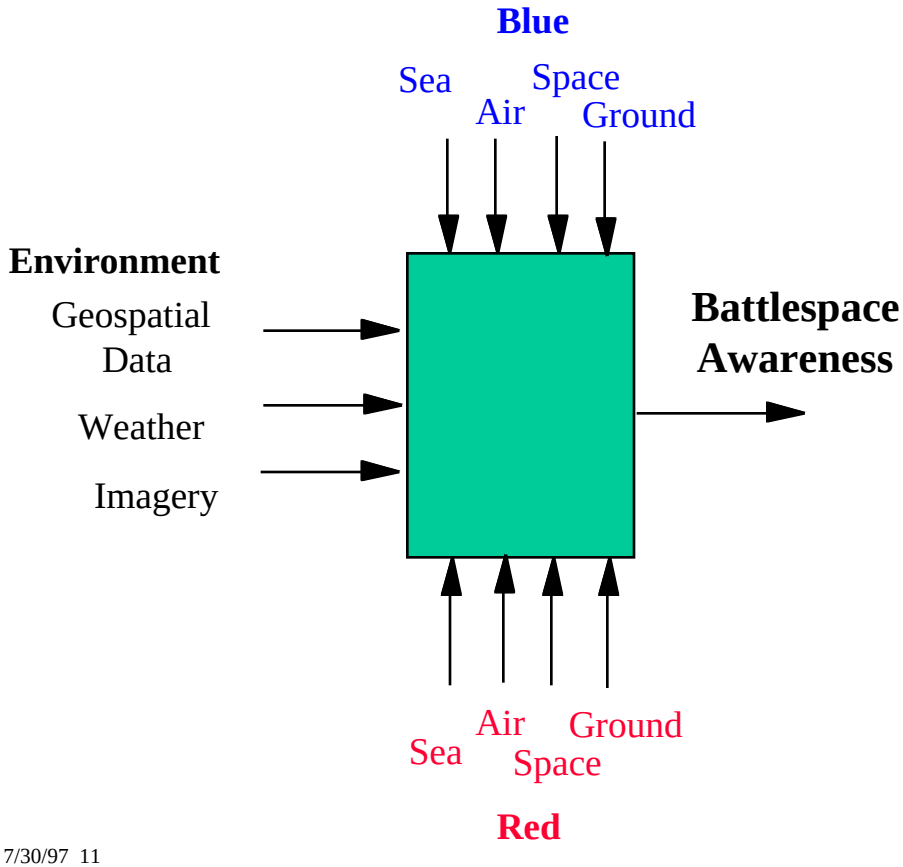
IS IPT

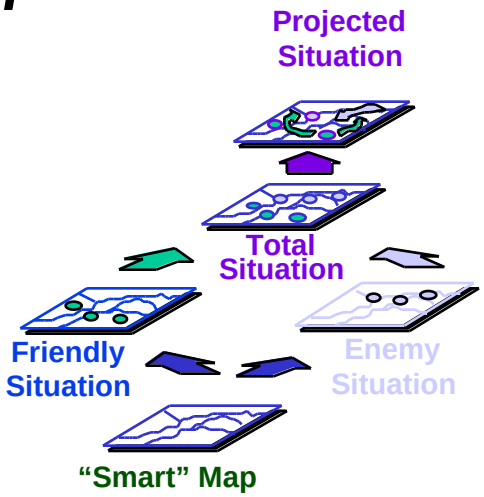
- Information Grid
  - Provides computing and communications backplane
  - Enables network centric operational architectures
- Sensor Grids
  - Generate Battlespace Awareness
  - Synchronize Battlespace Awareness with combat operations
  - Increase the Velocity of Information
- Engagement Grids
  - Exploit Battlespace Awareness to generate increased Combat Power
  - Enable massing of effects vs. massing of forces
  - Maximize Joint Combat Power
- Network Centric Warfare
  - Changes the dynamics of competition in warfare
  - Enables Increased Speed of Command
  - Rapidly “Locks Out” Adversary’s Courses of Action
  - Provides decisive competitive edge in warfare

Network Centric Warfare

IS IPT

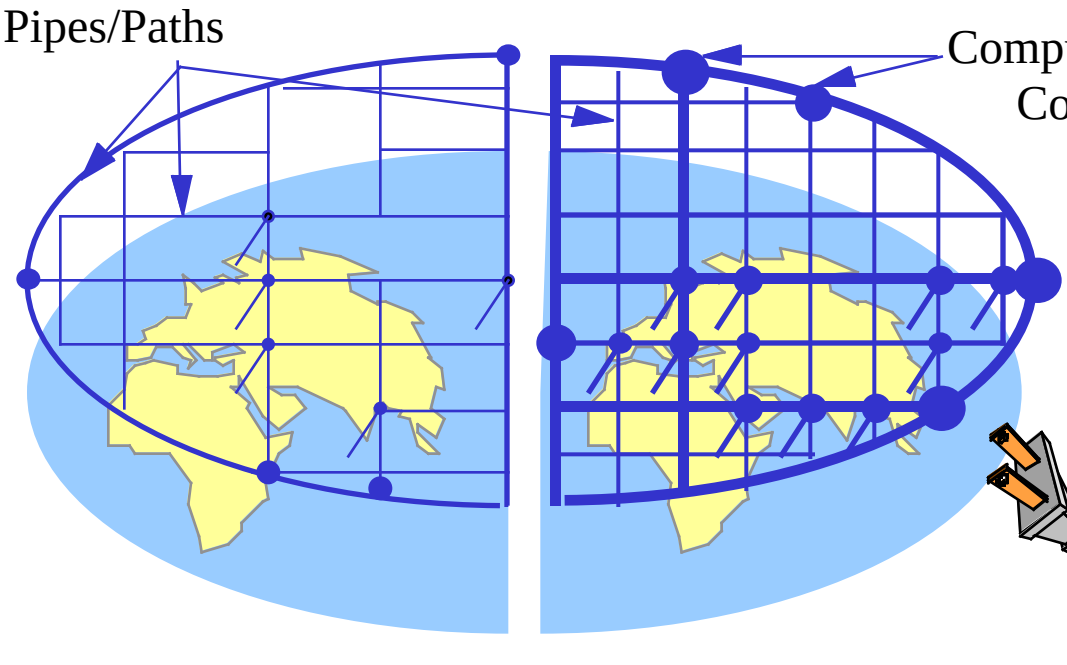
Battlespace Awareness Emerges as a Competitive Advantage in Warfare



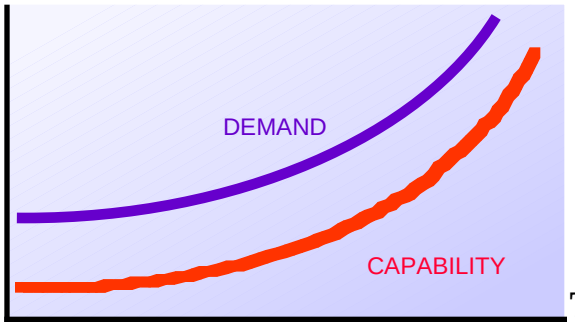


IS Strategy
Information Grid

IS IPT



Information

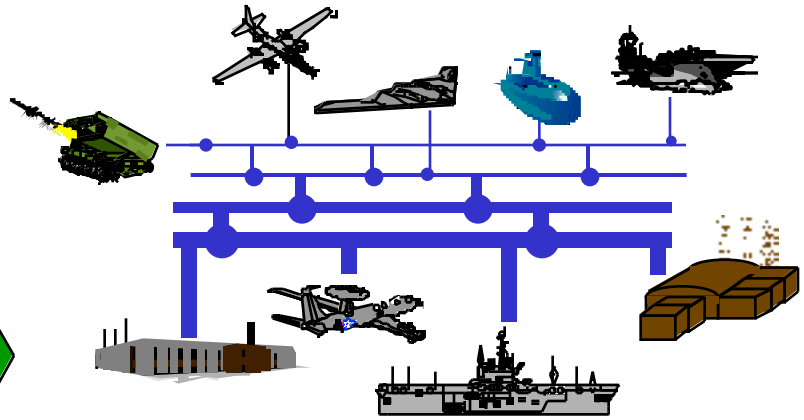


Time

Sensors

Shooters

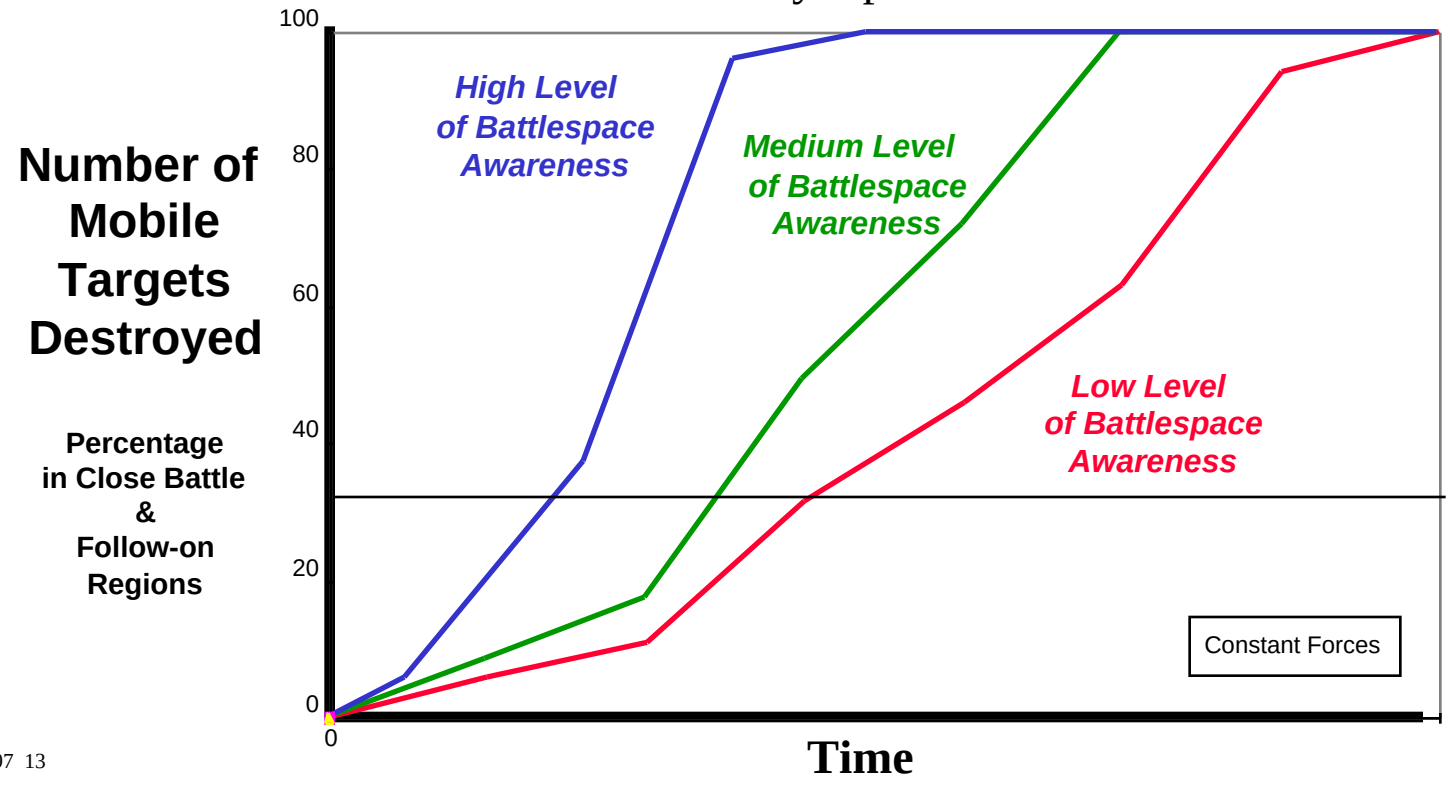
Command & Support Functions



Network Centric Warfare Increases Joint Combat Power

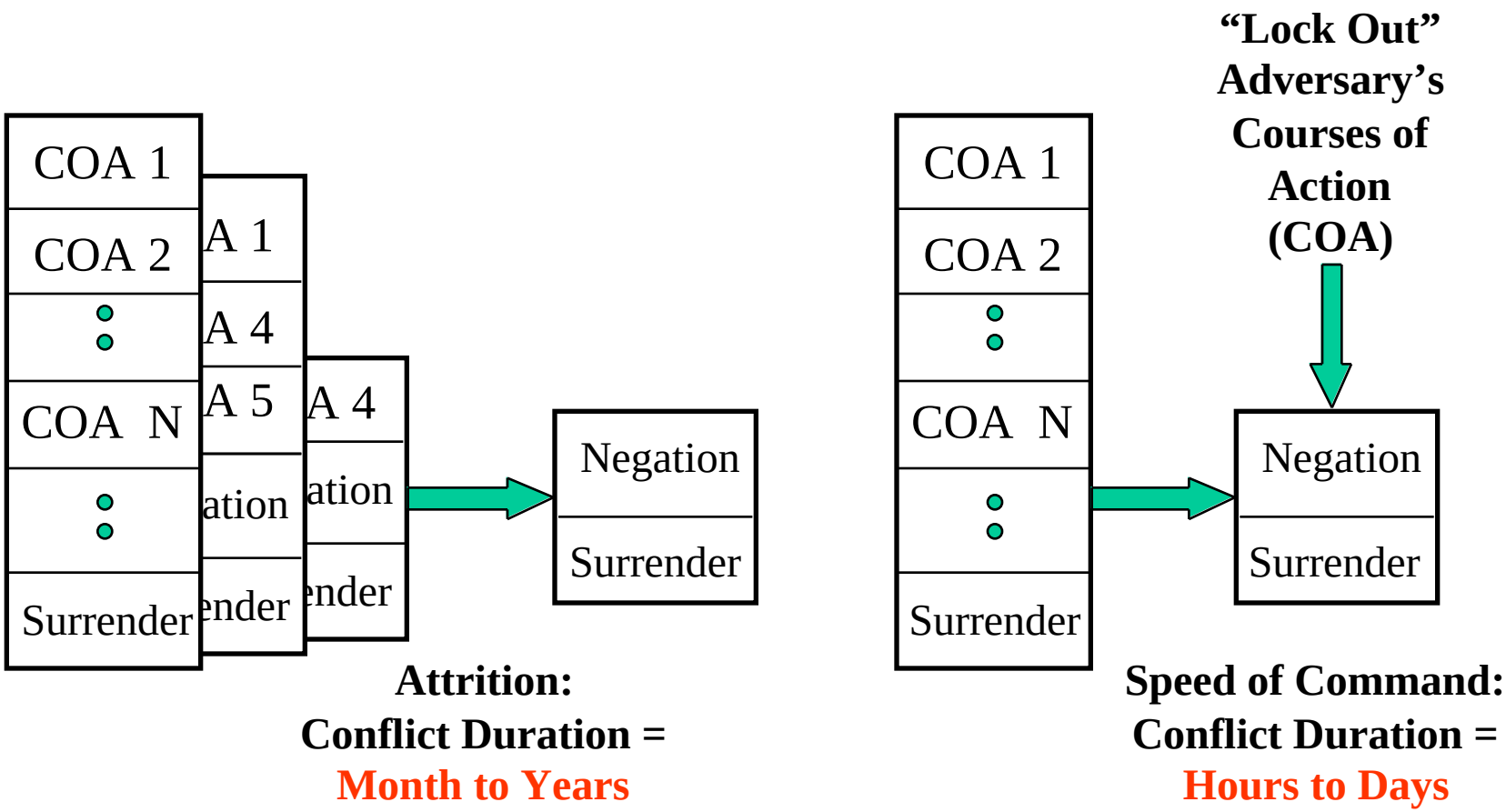
IS IPT

- **Impact of Speed of Command**
  - Dramatic Early Results
  - Greatest Rates of Change in Initial Phase of a Campaign
  - Inflicts Maximum Losses Against the Enemy
  - Shortens Timelines
  - Locks out Enemy Options



The Changing Dynamics of Competition: Attrition vs. Speed of Command

IS IPT



Emergence of Competition Based on Time

Why Experimentation?

IS IPT

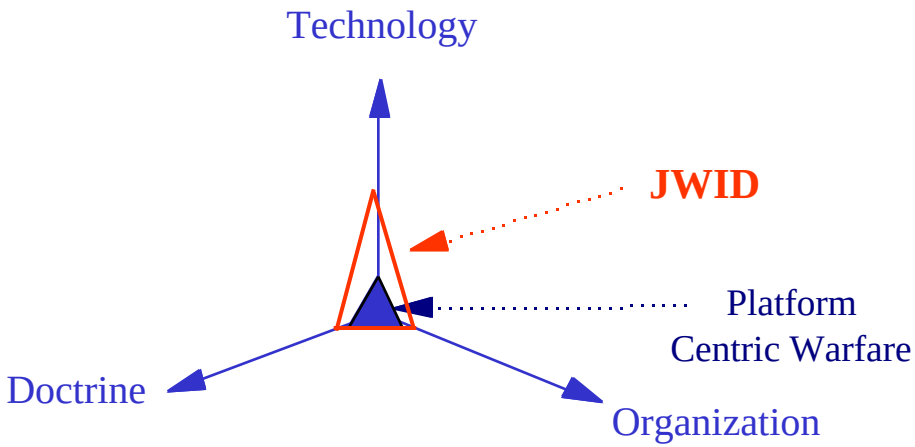
- The Problem:
  - How do we get to the Network-Centric Operational Concepts of JV2010 from where we are today?
- The Proposed Solution:
  - Joint Experimentation accelerates coevolution of the organization, doctrine, and technology of Network-Centric Warfare
  - Information Superiority Experiments emerge as a key element of a Joint Experimentation Program

Unique Value of Experiments

- Exercises:
  - Employ ***existing*** organization, doctrine, and technology
  - Success oriented training events
- Demonstrations:
  - Overlay ***new*** technology on existing organization and doctrine
  - Success oriented
- Experiments:
  - Enable organization, doctrine, and technology to ***coevolve***
  - Enable complexity to be managed with experimental design
  - Failure with lessons learned is an acceptable option

Experimentation → Coevolution

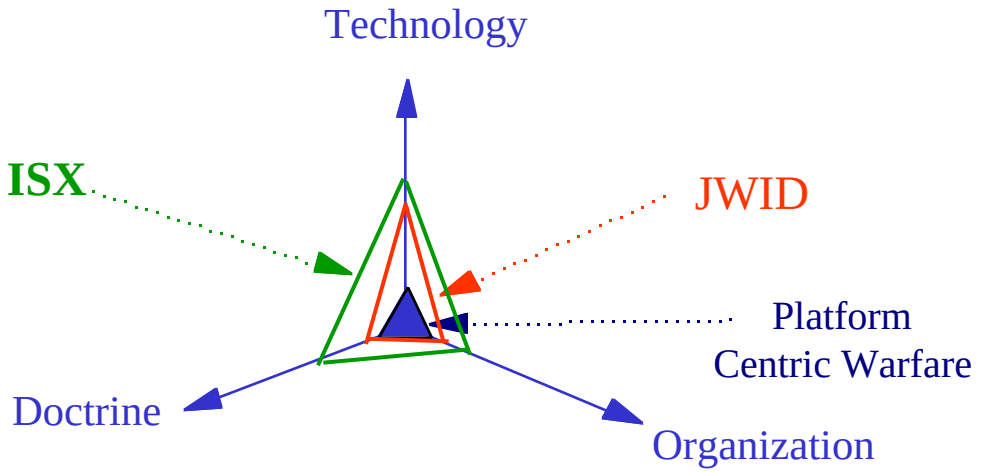
IS IPT



Joint Warrior Interc
Demonstrations (JV
- Technology Inser
- Organization & D
Constant

Information Superiority Experiment (ISX):

- Focus on Experimentation
- Organization & Doctrine allowed to Coevolve
- Allows Joint Warfighters to "Kick the Tires" of Information Superiority



Plan

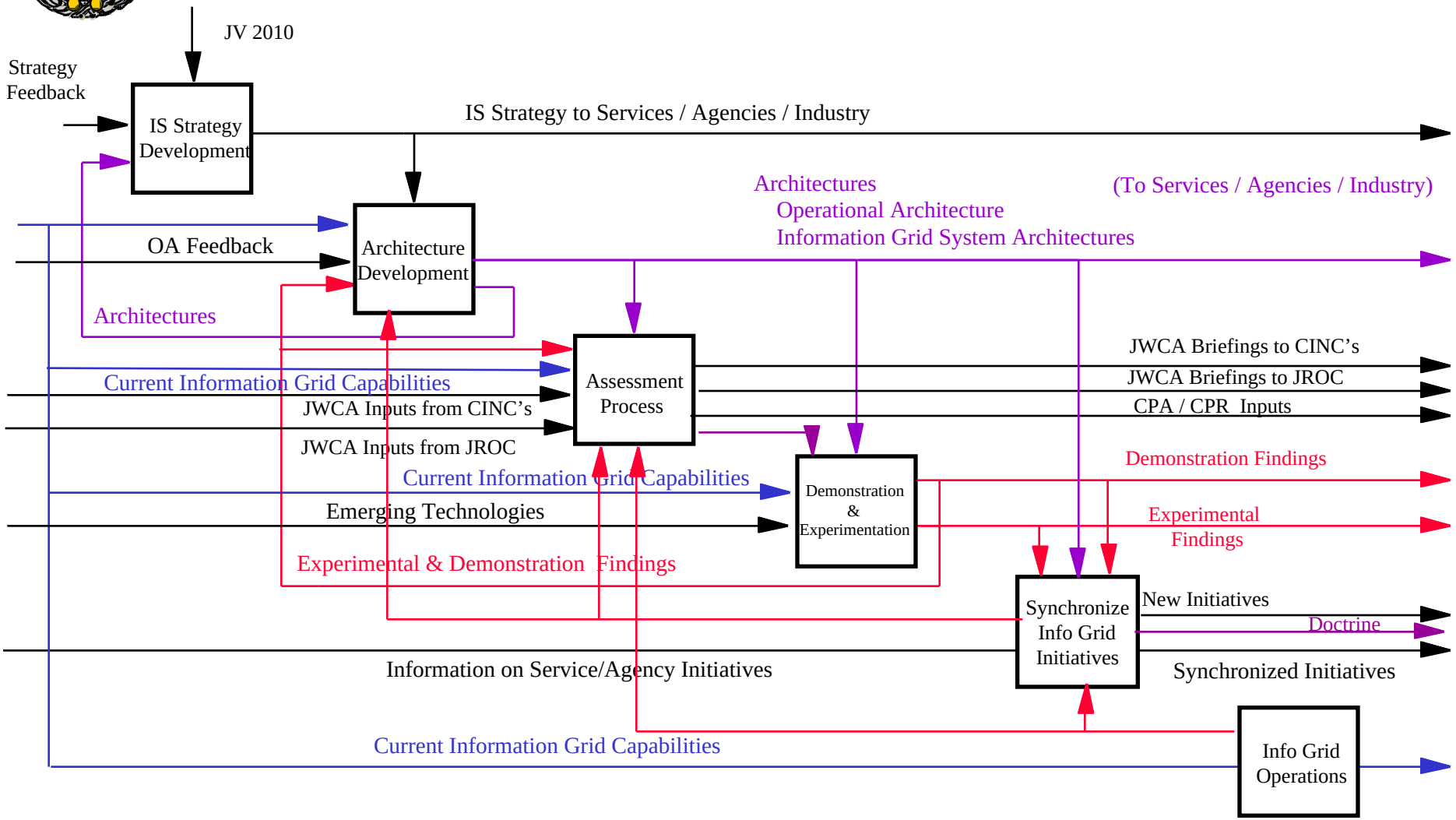
IS IPT

- Develop Joint Strategy for Information Superiority
- Develop Information Superiority Implementation Plan
- Implement Information Superiority Plan
- Assess and Track Information Superiority Implementation
- Report Progress of Implementation

UNCLASSIFIED

Information Superiority Process Model

IS IPT



IS IPT

THE JOINT STAFF
FY 1999-2003 PROGRAM OBJECTIVE MEMORANDUM

Shortfall

PROGRAM ELEMENT No. & TITLE

FJRP NUMBER: 6XX FJRP TITLE: Information Superiority Experiments

Requirement Title: Information Superiority Experiments (ISXs)

			POM YEARS				
$ = thousands	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
REQUIREMENT	0	300	7,500	10,000	15,000	20,000	30,000
FISCAL GUIDANCE	0	0	0	0	0	0	0
SHORTFALL/EXCESS	0	-300	-7,500	-10,000	-15,000	-20,000	-30,000

DIRECTORATE PRIORITY FOR FUNDING: *6 OF 9* TYPE REQUIREMENT: New Initiative

DESCRIPTION OF REQUIREMENT:

• ISXs are required to coevolve the organization, doctrine, and technology for the building blocks of Network-Centric Warfare: the Information Grid, Sensor Grids and Engagement Grids.

• These operational architectures enable the concepts of Dominant Maneuver, Precision Engagement, Focused Logistics and Full-Dimensional Protection.

• ISXs will employ a combination of virtual simulation with hardware and man-in-the loop experimentation to further define and explore relationships between the Information Grid, Sensor Grids and Engagement Grids.

• Experiments will be carried out using near-, mid- (2001-06) and objective term (2007-10) operational concepts, for a minimum of nine experiments carried out in the FY 99-02 time frame. Funding would support the stand alone ISXs as defined by the IS IPT in addition to providing funds to JS, services, agencies, etc. to leverage their planned activities/experiments/exercises in support of joint information superiority objectives/goals and also to synchronize the many DOD and industry IS-related activities.

JUSTIFICATION: The CJCS has directed that the implementation of JV 2010 be accelerated.

• ISXs provide a forcing function for JV2010 implementation by providing a pacing function for JV 2010 operational concept experiments.

• ISXs are a key element of the DJS supported Emerging Joint Strategy for Information Superiority and the Emerging Joint Staff Strategy for Joint Experimentation.

• ISXs will provide a significant means of providing senior decision makers with sound decision logic for assessing the value and impact of Information Superiority capabilities to support emerging operational concepts and resources decisions for the 2001 and follow on QDRs.

• Enables DOD Strategic Goals 1.2 & 1.3 and JS Goals 1.1, 1.2, 3.1 & 3.2

IMPACT IF NOT FUNDED:

• If not funded, senior decision makers will not have a sound decision logic and analytical basis on which to base future resource decisions relating to implementation of Information Superiority and JV 2010 and aggressive implementation of Joint Vision 2010 will be delayed.

• Without ISX's, JV2010 operational concept experiments will also be delayed.

Work Breakdown Structure

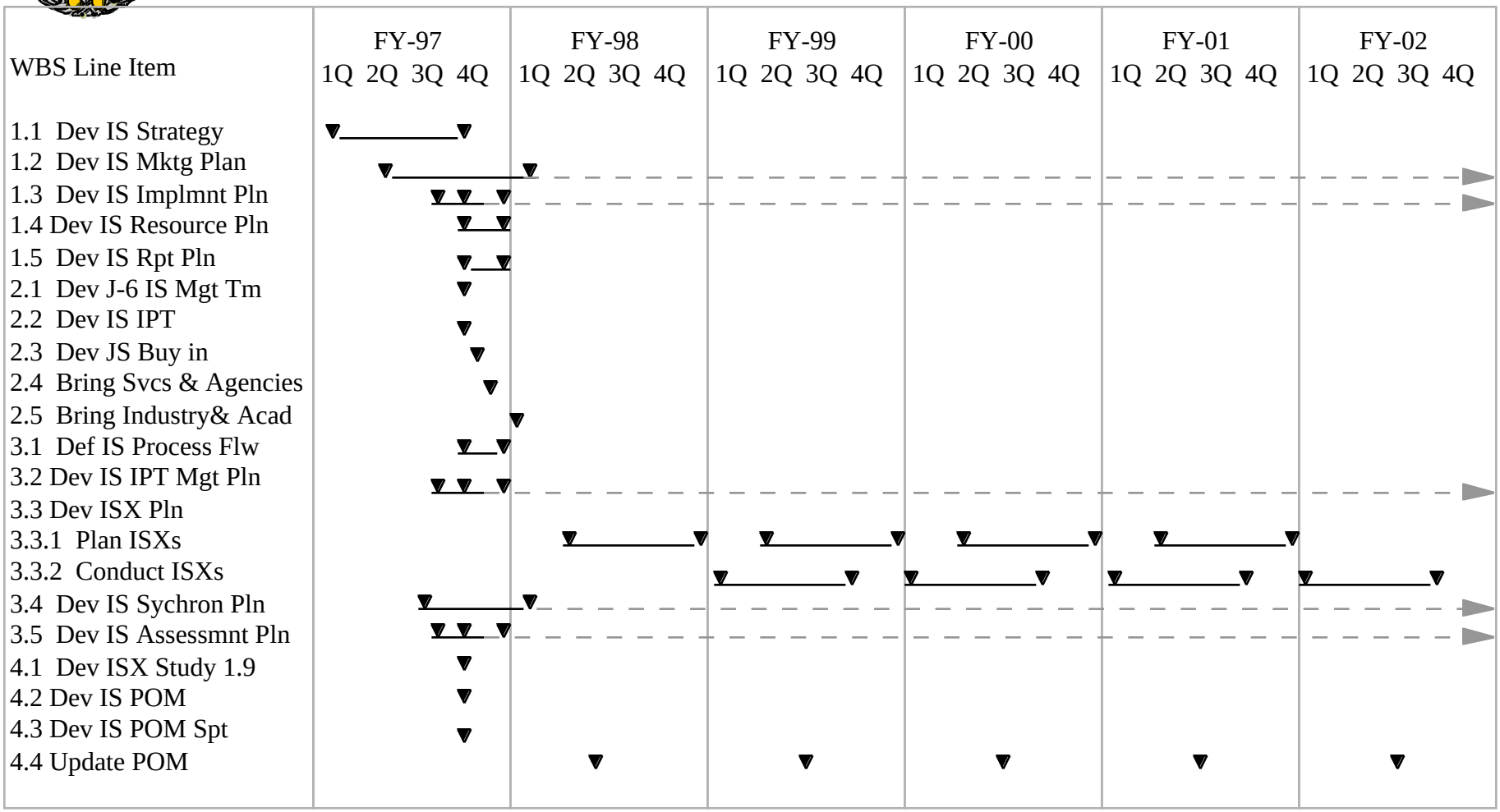
IS IPT

0.0 JV 2010

1.0 Develop IS Strategy	2.0 Develop IS Organization	3.0 Develop IS Implementation	4.0 Develop IS Resources	5.0 Develop IS Reporting
1.1 Develop IS Strategy	1.2 Develop IS Marketing Pln	1.3 Develop IS Implementation Plan	1.4 Develop IS Resource Plan	1.5 Develop IS Reporting Plan
2.1 Develop J6 IS Mgt Team	2.2 Develop IS Integ Prod Tm	2.3 Develop JS Buy in	2.4 Bring in Svcs & Agncs	2.5 Bring in Industry/Acad
3.1 Define IS Process Flow	3.2 Develop IS IPT Mgt Plan	3.3 Develop ISX Plan	3.4 Develop IS Sychron Plan	3.5 Develop IS Assessmnt Pln
4.1 Develop ISX J-8 Fm1.9	4.2 Develop IS POM	4.3 Develop JS POM Spt	4.4 Update POM	4.5

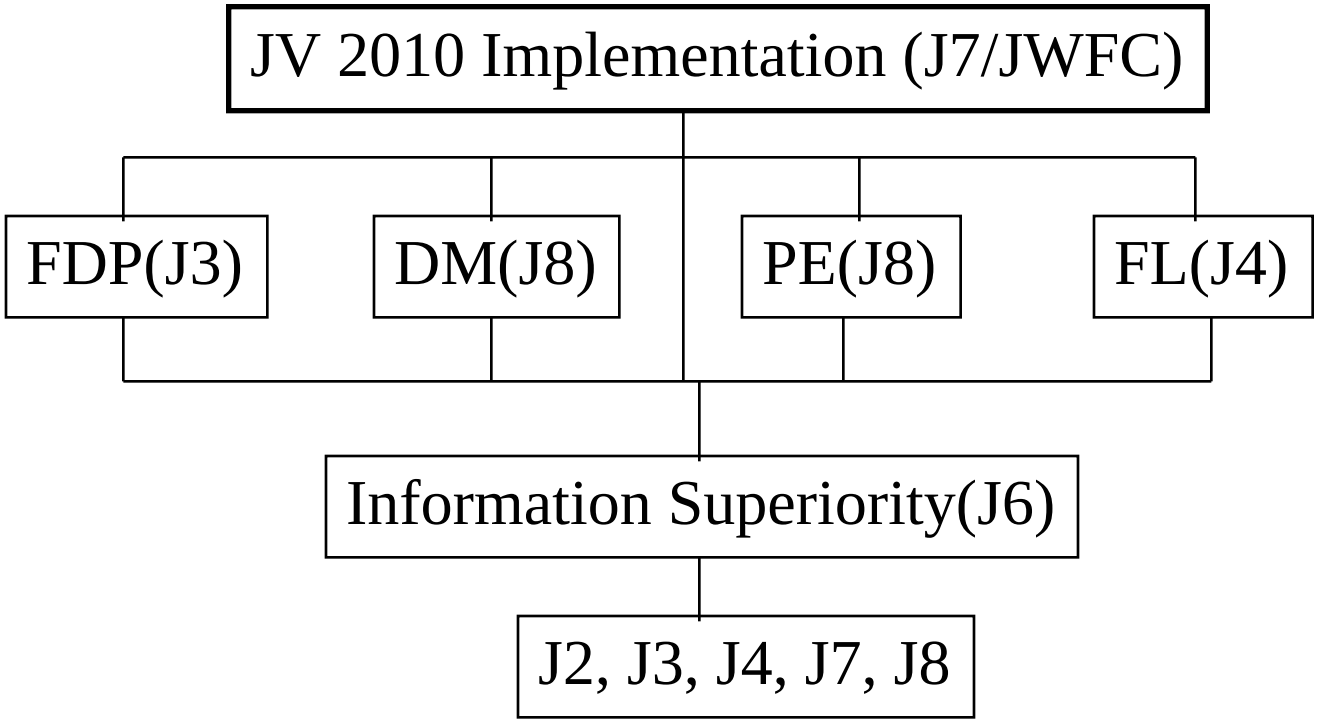
Schedule

IS IPT



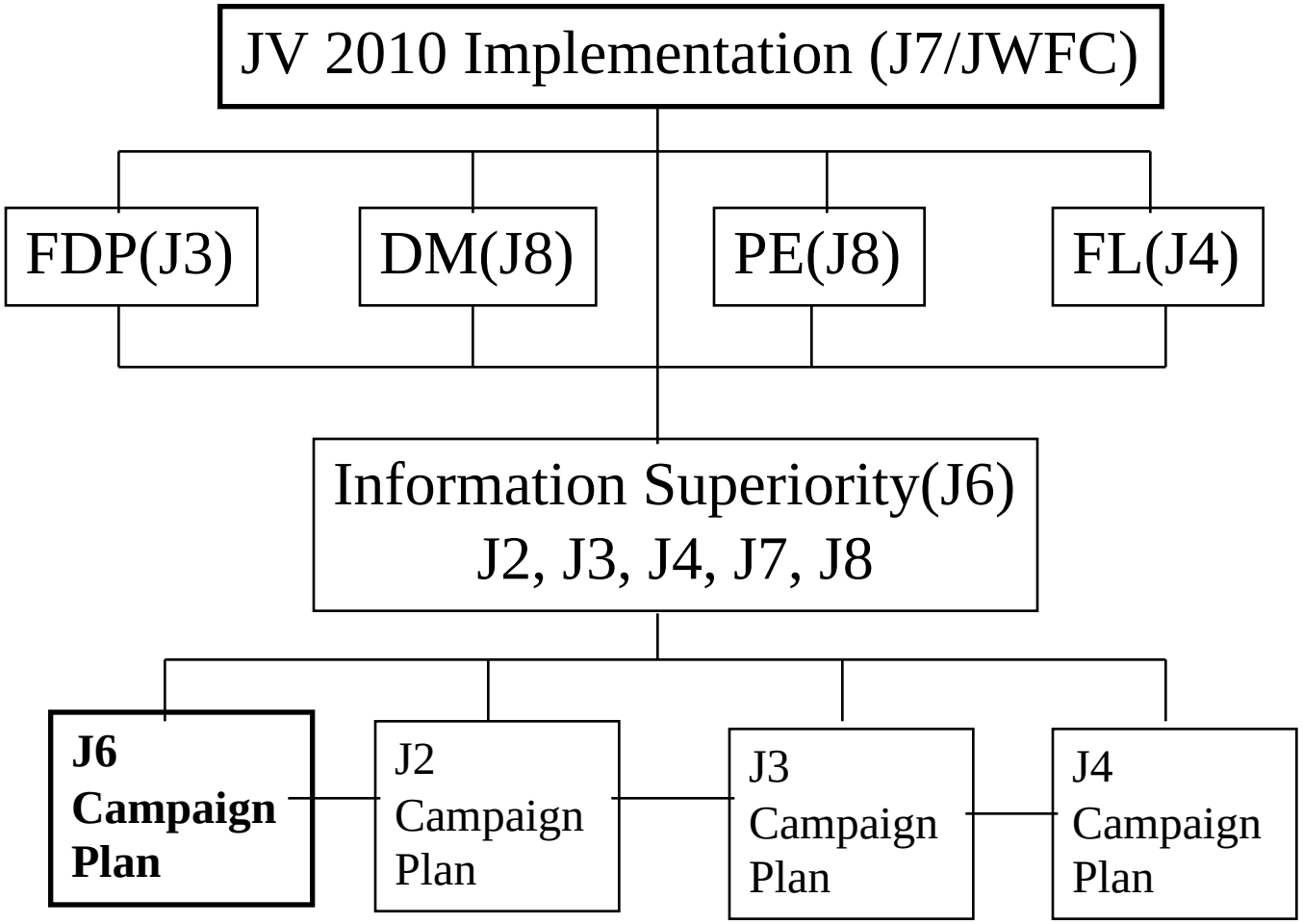
JV 2010 Information Superiority: Joint Staff Organizational Implementation

IS IPT



JV 2010 Information Superiority: Joint Staff Implementation Planning

IS IPT



Draft Organization

IS IPT

Information Superiority IPT (VJ6 Chair)(0-7 Level)

Integration Team (Col Ryan, Chair) (0-6/0-5 level)

IS Working-Level IPT Teams

Technology

Battlespace Awareness
-Sensor Grids

Information Dissemination
-Information Grid
-- ISXs/Demos/Exercises
-- Synchronized Acq

Speed of Command
-Engagement Grids

Supporting

Emerging Operational Concepts

- Dominant Maneuver
- Precision Engagement
- Full-Dimensional Protection
- Focused Logistics

Possible IS Working-Level IPT Teams

IS IPT

Integration Team (Secretariat)

ISX

Synchronization

Battlespace Awareness
(Sensor Grid)

Information
(Information Grid)

Speed of Command
(Engagement Grid)

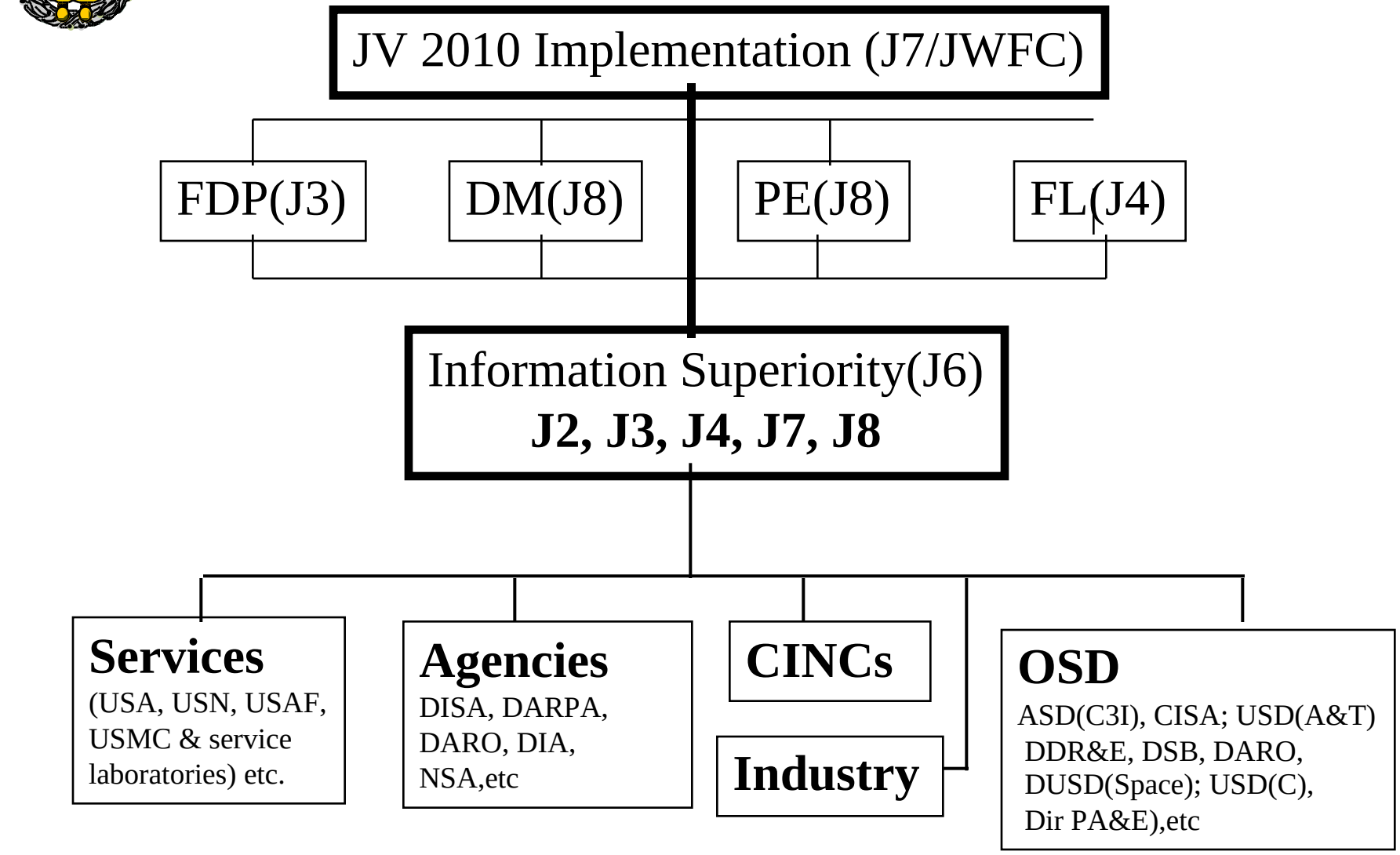
IS IPT Working Team Missions

IS IPT

- ISX Team: Formulate, design, plan, manage, execute, record and lead reporting on IS experiments (**ISXs**)
- Synchronization Team: Coordinate assessment of ISXs and incorporation of findings into JROC/JWCA, PPBS, other IPTs and DoD investment management processes
- Battlespace Awareness Team: Monitor and assess current investment processes involving the **Sensor Grid** and recommend experiments to optimize these processes
- Speed of Command Team: Monitor and assess current investment processes involving the **Engagement Grid** and recommend experiments to optimize these processes
- Information Team: Monitor and assess current investment processes involving the **Information Grid** and recommend experiments to optimize these processes

Information Superiority Organizational Implementation

IS IPT



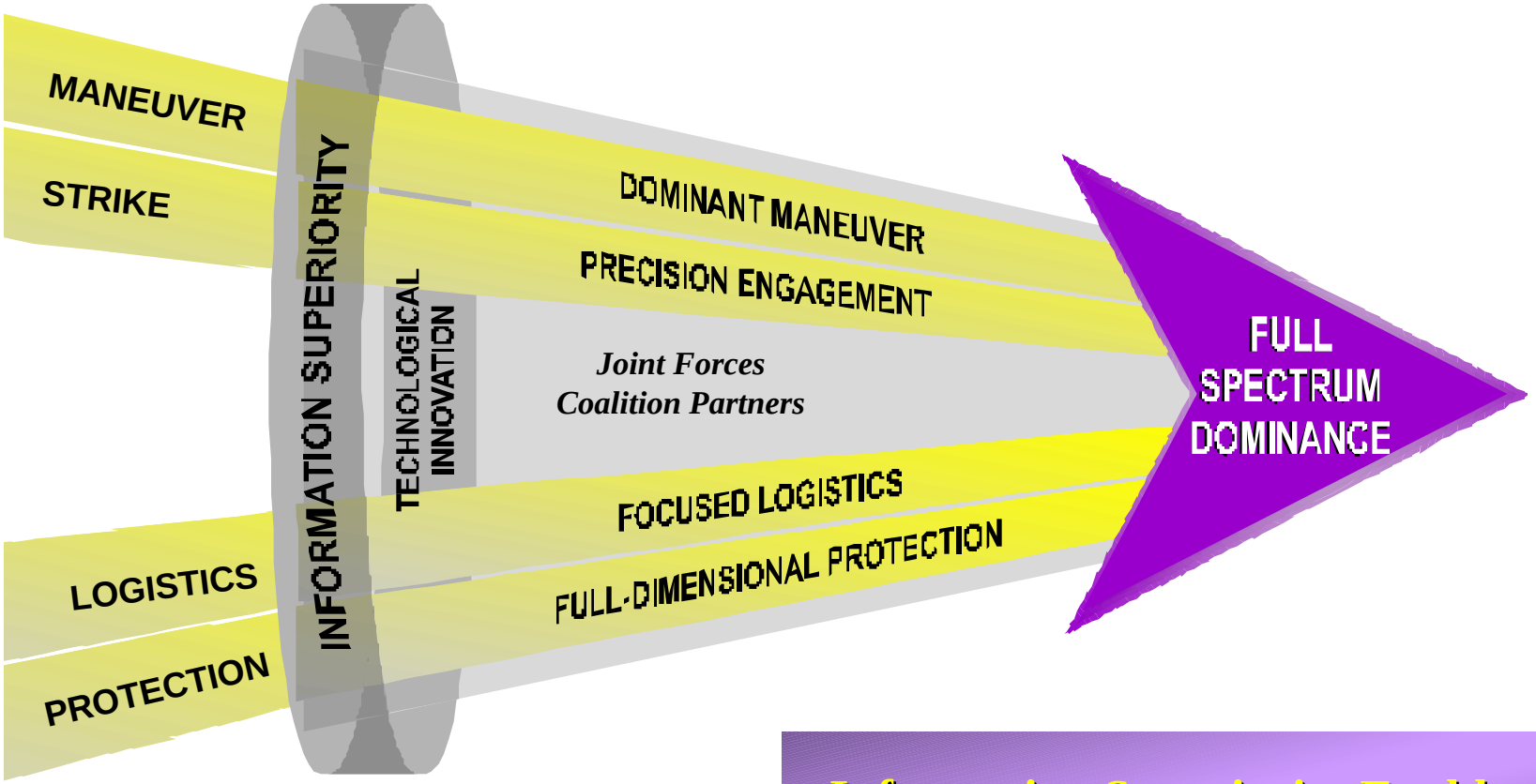
Road Ahead

IS IPT

- Stand up IPT upon signature
  - build management/implementation/assessment plan(s) (Signature +30 days),
  - manage FFRDC
  - begin synchronizing programs, plans, organizations, doctrine
- Assess ISX opportunities upon approval of FY 98 funds

IS IPT

Joint Vision 2010



Dr. R. Tom Goodden
(703) 614-0951
gooddetr@js.pentagon.mil

- **Information Superiority Enables Emerging Operational Concepts**